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				Application Number	10/573,764
				Filing Date	March 29, 2006
				First Named Inventor	Williams, et al.
				Group Art Unit	1647
				Examiner Name	Ian Dang
Sheet	1	of	4	Attorney Docket Number	21421P

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

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/Jan Dang/

**Date Considered**

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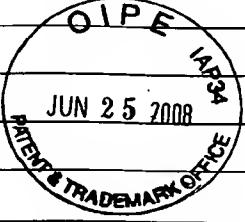
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.			
		Bhattacharjee, et al., "T-Type Calcium Channels Facilitate Insulin Secretion by Enhancing General Excitability in the Insulin-Secreting Beta-Cell Line, INS*," Endocrinology, Vol. 138, No. 9, 1997, pp. 3735-3740.			
		Bourinet, et al., "Splicing of alpha1A subunit gene generates phenotypic variants of P- and Q-type calcium channels," Nature Neuroscience, Vol. 2, No. 5, May 1999, pp. 407-415.			
		Buhler, et al., "Cardiovascular care with the new T-type calcium channel antagonist: possible role of attendant sympathetic nervous system inhibition," Journal of Hypertension, Vol. 15, Supplement 5, 1997, pp. S3-S7.			
		Burgess, et al., "Single gene defects in mice: the role of voltage-dependent calcium channels in absence models," Epilepsy Research, Vol. 36, 1991, pps. 111-122.			
		Catterall, "Excitation-Contraction Coupling in Vertebrate Skeletal Muscle: A Tale of Two Calcium Channels," Cell, Vol. 64, March 8, 1991, pp. 871-874.			
		Catterall, "Functional Subunit Structure of Voltage-Gated Calcium Channels," Science, 1991b, Vol. 253, pp.499-1500.			
		Catterall, "Structure and Regulation of Voltage-Gated Ca <sup>2+</sup> Channels," Annu. Rev. Dev. Biol., Vol. 16, 2000, pp. 521-555.			
		Coulter, et al., "Characterization of Ethosuximide Reduction of Low-Threshold Calcium Current in Thalamic Neurons," Annals of Neurology, Vol. 25, No. 6, June 1989, pp. 582-593.			
		Cremers, et al., "Effects of the Novel T-Type Calcium Channel Antagonist Mibepradil on Human Myocardial Contractility in Comparison with Nifedipine and Verapamil," J. of Cardiovascular Pharmacology, Vol. 29, 1997, pp. 692-696.			
		De Waard, et al., "Structural and Functional Diversity of Voltage-Activated Calcium Channels," (ed. T. Narahashi) pp. 41-87, (Plenum Press, New York, 1996).			
		Dunlap, et al., "Exocytotic Ca <sup>2+</sup> channels in mammalian central neurons," Trends Neurosci., Vol. 18, 1995, pp. 89-98.			
		Enyeart, et al., "T-Type Ca <sup>2+</sup> Channels Are Required for Adrenocorticotropin-Stimulated Cortisol Production by Bovine Adrenal Zona Fasciculata Cells," Mol. Endo., Vol. 7, No. 8, 1993, pp. 1031-1040.			
		Ertel, et al., "T-Type Ca <sup>2+</sup> Channels and Pharmacological Blockade: Potential Pathophysiological Relevance," Cardiovascular Drugs and Therapy, Vol. 11, 1997, pp. 723-739.			
		Ertel, et al., "Low-voltage-activated T-type Ca <sup>2+</sup> channels," Trends Pharmacology Sci., 1997, pp. 723-739.			
		GenBank Accession Number AF211189			

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		Griswold, et al., "Protein Secretions of Sertoli Cells," Int. Rev. Cytol., 1988, pp. 133-156.		
		Hess, et al., "Calcium Channels in Vertebrate Cells," Ann. Rev. Neurosci., Vol. 56, 1990, pp. 337-356.		
		Hofmann, et al., "Voltage-Dependent Calcium Channels: From Structure to Function," Ref. Physiol. Biochem. Pharmacol., Vol. 139, 1999, pp. 33-87.		
		Huguenard, et al., "Low-threshold Calcium Currents in Central Nervous System Neurons," Annu. Rev. Physiol., Vol. 58, 1996, pp. 329-348.		
		Lacinova, et al., "Low Voltage Activated Calcium Channels: from Genes to Function," Gen. Physiol. Biophys. Vol. 19, 2000, pp. 121-136.		
		Lambert, et al., "T-Type Ca <sup>2+</sup> Current Properties Are Not Modified by Ca <sup>2+</sup> Channel Beta Subunit Depletion in Nodosus Ganglion Neurons," Thje Journal of Neuroscience, Vol. 17, No. 17, 1997, pp. 6621-6628.		
		Leuranguer, et al., "Antisense depletion of beta-subunits fails to affect T-type calcium properties in a neuroblastoma cell line," Neuropharmacology, Vol. 37, 1998, pp. 701-708.		
		Lijnen, et al., "Proliferation of Human Peripheral Blood Mononuclear Cells During Calcium Entry Blockade, Role of Protein Kinase C," Exp. Clin. Pharmacol., Vol. 21, 1999, pp. 253-259.		
		Llinas, et al., "Distribution and functional significance of the P-type voltage-dependent Ca <sup>2+</sup> channels in the mammalian central nervous system," TINS, Vol. 15, No. 9, 1992, pp. 351-355.		
		McCleskey, et al., "Functional Properties of Voltage-Dependent Calcium Channels," Current Topics in Membrane, Vol. 39, 1991, pp. 295-326.		
		McCormick, et al., "Sleep and Arousal: Thalamocortical Mechanisms," Annu. Rev. Neurosci., Vol. 20, 1997, pp. 185-215.		
		Mittman, et al., "Structure and alternative splicing of the gene encoding alpha II, a human brain T calcium channel alpha I subunit," Neuroscience Letters, Vol. 269, 1999, pp. 121-124.		
		Monteil, et al., "Specific Properties of T-type Calcium Channels Generated by the Human alpha II Subunit," Journal of Biol. Chem., Vol. 275, No. 22, June 2000, pp. 16530-16535.		
		Perez-Reyes, et al., "Molecular Physiology of Low-Voltage-Activated T-type Calcium Channels," Physiol. Rev., Vol. 83, January 2003, pp. 117-161.		
		Perez-Reyes, et al., "Molecular characterization of a neuronal low-voltage-activated T-type calcium channel," Letters to Nature, Vol. 39, February 1998, pp. 896-900.		

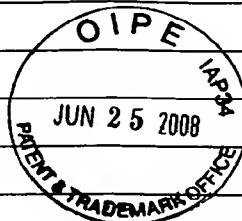
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		Sather, et al., "Distinctive Biophysical and Pharmacological Properties of Class A (B1) Calcium Channel Alpha1 Subunits," <i>Neuron</i> , Vol. 11, August 1993, pp. 291-303.			
		Sen, et al., "T-Type Channels Are Abnormal in Genetically Determined Cardiomyopathic Hamster Hearts," <i>Circulation Research</i> , Vol. 75, No. 1, July 1994, pp. 149-155.			
		Stea, et al., "Localization and functional properties of a rat brain alpha1A calcium channel reflect similarities to neuronal Q- and P-type channels," <i>PNAS USA</i> , Vol. 91, October 1994, pp. 10576-10580.			
		Suzuki, et al., "T-type calcium channels mediate the transition between tonic and phasic firing in thalamic neurons," <i>PNAS USA</i> , Vol. 86, September 1989, pp. 7228-7232.			
		Talley, et al., "Differential Distribution of Three Members of a Gene Family Encoding Low Voltage-Activated (T-Type) Calcium Channels," <i>The Journal of Neuroscience</i> , Vol. 19, No. 6, 1999, pp. 1895-1991.			
		Todorovic, et al., "Pharmacological Properties of T-Type Ca <sup>2+</sup> Current in Adult Rat Sensory Neurons: Effects of Anticonvulsant and Anesthetic Agents," <i>J. Neurophysiol.</i> , Vol. 79, 1998, pp. 240-252.			
		Tsakiridou, et al., "Selective Increase in T-Type Calcium Conductance of Reticular Thalamic Neurons in a Rat Model of Absence Epilepsy," <i>The Journal of Neuroscience</i> , Vol. 15, No. 4, April 1995, pp. 3110-3117.			
		Tsien, et al., "Multiple types of neuronal calcium channels and their selective modulation," <i>TINS</i> , Vol. 11, No. 10, 1988, pp. 431-438.			
		Wang, et al., "Ca <sup>2+</sup> influx via T-type channels modulates PDGF-induced replication of mouse fibroblasts," <i>Am. J. Physiol.</i> , Vol. 265, 1993, pp. C1239-C1246.			
		White, et al., "Transient low-threshold Ca <sup>2+</sup> current triggers burst firing through an afterdepolarizing potential in an adult mammalian neuron," <i>PNAS USA</i> , Vol. 86, September 1989, pp. 6802-6806.			
		Zu, et al., "Increase T-type calcium current in atrial myocytes from adult rats with growth hormone-secreting tumors," <i>PNAS USA</i> , Vol. 87, June 1990, pp. 4655-4659.			

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